

## REVIEWS OF RECENT BOOKS

**Darbishire, A. D.** *Breeding and the Mendelian Discovery.* London. Cassell & Co., 1911-1912; 7s. 6d. net.

A SIMPLE treatise on the most elementary aspects of Genetics treated exclusively from the Mendelian standpoint, written in an attractive expository style, and illustrated with an abundance of beautiful plates. The author achieves success in his aim, namely, "to open the door to an intimate familiarity with a few instances of the Mendelian phenomenon," and those who have no acquaintance with the scientific study of heredity could desire no clearer introduction to the subject.

There are few excursions beyond the immediately obvious, and in these the author has not been altogether happy. The greater part of the account of inheritance in mice would have been better omitted; the treatment of colour inheritance being confused and serving very little useful purpose. Miss Durham's work would provide material of greater expository value. The tendency, illustrated here, to substitute imperfect home-made material for the best and most convincing results obtainable is a serious defect in a popular book; and this is emphasised by a slowness in giving honour where due. For instance, in the account of the Andalusian fowl, that classical and unavoidable bird, Mr. Darbishire refers only to an undated letter of his own to "The Country Home." Mr. Bateson appears occasionally as an essayist and inventor of symbols; Professor Punnett and Miss Saunders escape mention; and, generally speaking, there is little attempt to indicate other scientific work than that of Mendel and Mr. Darbishire himself.

The more advanced student of heredity will find the book somewhat over-laboured: to write close on 300 pages without mentioning the 9:7 ratio, frequency curves, or gametic coupling is a noteworthy feat of extension. The eugenicist will welcome the lucid statement of fundamental principles, but will find no mention made of his own branch of applied Genetics nor of instances of human inheritance other than iris-pigmentation and colour-blindness.

The text of the second edition is still disfigured by a number of mistakes. The word "ovule" is far from synonymous with "egg." Fasciated plants should not be defined as "those in which the nodes do not, as in the normal plant, succeed one another regularly up the stem, but occur in profusion at the top." There are ten stamens in the flower of *Pisum*, not nine. There is no difficulty in conceiving susceptibility to rust in wheat as a dominant on the Presence-Absence Theory, if the paradox be remembered that in this case immunity is the result of over-susceptibility. The usual difficulty is experienced in describing the relations of pollen grain and male gamete. After speaking of the inheritance of horns in sheep, it is remarked that "this phenomenon is known as sex-limited inheritance, because the course of descent of a character is affected by the sex of the individuals which bear it"—an evident confusion. It is as true to say that white is dominant in Andalusians as to say that black is: there is no necessity for either statement, especially as the author rightly rejects the view that dominance is an essential feature of the Mendelian Theory.

We have nothing but praise for the illustrations. These include 34 full page and folding plates, mostly photographed from life, and four plates reproduced by the three-colour process. The objects are excellently chosen and arranged with a view to demonstration, and there are several valuable genealogical diagrams. Five photographs of *Denothera*

*Lamarckiana* and some of its mutants from Professor de Vries are included. Another feature of interest is the reproduction of an original paper by John Goss, published in 1822, in which he describes experiments with peas which are now seen to give a simple Mendelian result. There is a useful chapter on methods of culture and cross-breeding of peas. The book is attractive in *format* and reasonable in price.

R. H. COMPTON.

**Grotjahn, DR. ALFRED.** *Soziale Pathologie.* Berlin, 1912. August Hirschwald; pp. 702; M. 18.

THE "Social Pathology" is, in the author's own words, an attempt to systematise our knowledge of the relationship between human disease and social conditions, so as to form a basis for a science of Social Medicine and Social Hygiene. We may say at once that the book, coming as it does from a pioneer of the movement, is as remarkable for the wideness of its survey of facts as for the lucidity and thoroughness in the handling of the involved social questions.

We have an exhaustive account of most of the pathological conditions as effecting our modern civilisation, their frequency, etiology, clinical types, etc. Illuminative statistics are given abundantly, which are the more valuable for the hygienist and social reformer, as they are in most cases newly brought together. In each case the reciprocal effect between disease and the social factors is studied. On the one hand, it is shown how disease is affected by the social *milieu*; on the other, the effects of disease are traced in their ever-extending influence upon human conditions and human kind.

It is especially in the latter problem that the eugenicist is interested. Dr. Grotjahn produces figures and facts to substantiate his conclusions, which is more than can generally be said of the average eugenicist. It is this which makes his proposals so valuable, which are, as far they go, all in favour of eugenic measures; though, to do him justice, we must mention that he condemns that class of eugenicist who would look upon eugenic methods as the sole and only panacea for all social ills. For him eugenics ("generative hygiene," he calls it) can only form a part—and that perhaps a minor part—of a general scheme of social hygiene.

It is a sheer impossibility to give within the limit of a short review an insight into the extent and scope of Dr. Grotjahn's work, which is, indeed, an eminent achievement. His book forms a mine of instruction for all would-be reformers, the more so as a lengthy bibliography is added to each chapter.

As to special issues, we can only mention a few. We have already pointed out that Dr. Grotjahn speaks of the necessity of eugenic endeavours with no uncertain voice. Indeed, his proposals are at once thorough and free from cant. He advocates permanent detention of hereditarily tainted stocks, such as the insane, chronic alcoholics, etc. He insists—mark the point—on the necessity of a systematic campaign against venereal contamination of the people, not only by complete isolation of all gonorrhœal and syphilitic cases, but by unabashed scientific instruction of the young of both sexes in matters of sexual hygiene and pathology. Not less emphatic is his plea for preventive measures during marital life, wherever conditions exist which make propagation of the parental type undesirable. He would include an excessive and exhausting rate of child-birth, so common with the poor, among the indications for such prophylaxis. As to other measures, the raising of the moral conscience with regard to the value of human life, the establishment of a state-endowment of motherhood or of family insurance, are accessory means capable of realisation in the near future.

An English edition is in course of preparation.

S. HERBERT.